3.0 PRIORITY TERTIARY BASINS

This chapter describes and discusses the eight highest priority tertiary basins in the Estero Bay Watershed. This prioritization is based on nutrient, runoff, and total suspended solids loading. These priority basins for loading are listed below.

!	Hendry Creek	10
!	Hendry Creek	8
!	Ten-Mile Canal	11
!	Mullock Creek	4
!	Hendry Creek	6
!	Hendry Creek	9
!	Ten-Mile Canal	4
!	Ten-Mile Canal	9

The ranks listed below are not area-weighted. Area weighted ranks for these basins are listed in Chapter 2.

3.1 Hendry Creek - 10 Tertiary Basin

Location: This basin is situated on the northern edge of the Hendry Creek basin, straddling U.S. 41. The Hendry Creek - 10 basin is northwest of Six-Mile Cypress slough and forms the western shore of the Ten-Mile Canal for much of the canal's length.

Land Use: This basin is predominated by urban residential and commercial land uses. It does contain one large area of public land, Lakes Park, a county park.

Soils: HSG D soils are most common (1957.2 acres), followed by C (280.2 acres).

Hydrologic Features: This basin is dominated by the Ten-Mile Canal which forms the basin's eastern boundary. The borrow-pit lakes in Lakes Park are another important hydrologic feature.

Un-weighted Ranks: Total Discharge = 4.0 Nutrient Load = 11.0
TSS Load = 2 Wetland Risk = 14.0

Table 3.1 Land use in the Hendry Creek - 10 tertiary basin.		
Land Use/Land Cover Type	**Area (acres)**	**Percent Coverage**
Urban	1,637	66.6
Cropland/Pasture	27	1.1
Citrus	0	0.0
Wetland	30	1.2
Forested Upland	722	29.4
Water	42	1.7

3.2 Hendry Creek - 8 Tertiary Basin

Location: The Hendry Creek - 8 subbasin is situated along the northwestern boundary of the Hendry Creek secondary basin. This tertiary basin includes the northwestern tributaries of Hendry Creek**.**

Land Use: The land use in this basin is dominated by residential and commercial uses. There is also a significant area of golf courses associated with the residential developments.

Soils: HSG D soils are most common (729.5 acres), followed by C (115.4 acres).

Hydrologic Features: The tributaries of Hendry Creek dominate the hydrologic features in this subbasin. The upper reaches of some tributaries are channelized. Borrow pits and stormwater ponds are also prevalent in this basin.

Un-weighted Ranks: Total Discharge = 7.0 Nutrient Load = 7.5
TSS Load = 5 Wetland Risk = 47.5

Table 3.2. Land use in the Hendry Creek - 8 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	570	66.1
Cropland/Pasture	59	6.8
Citrus	0	0.0
Wetland	41	4.7
Forested Upland	168	19.4
Water	25	2.9

3.3 Ten-Mile Canal - 11 Tertiary Basin

Location: The Ten-Mile Canal - 11 tertiary basin is located in the northern-most portion of the Ten-Mile subbasin, north of Colonial Boulevard.

Land Use: This subbasin still retains a significant amount of open space in the form of undeveloped uplands, wetlands, and pasture or fallow agricultural lands. This subbasin is rapidly developing.

Soils: HSG D soils are most common (2,526.8 acres).

Hydrologic Features: Other than wetlands, this subbasin contains few hydrologic features. There are some ditches, borrow pits, and stormwater ponds, but surface water features are not dominant aspects of this subbasin.

Un-weighted Ranks: Total Discharge = 14.0 Nutrient Load = 1.5
TSS Load =4 Wetland Risk = 23.0

Table 3.3. Land use in the Ten-Mile Canal -11 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	1,104	43.0
Cropland/Pasture	307	11.9
Citrus	0	0.0
Wetland	260	10.1
Forested Upland	808	31.5
Water	90	3.5

3.4 Mullock Creek - 4 Tertiary Basin

Location: This tertiary basin encompasses San Carlos Park. The basin is located east of U.S. 41 and west of I-75, in the northern corner of the Mullock Creek basin.

Land Use: The San Carlos Park residential developments occupy almost all of this subbasin. Small areas of agricultural lands, wetlands, and forested uplands occur on the edges of San Carlos Park. The residential development includes an area of golf courses.

Soils: HSG D soils are most common (2,947.4 acres), followed by C, A and B (331.0 acres, 161.3, and 6.7, respectively).

Hydrologic Features: This subbasin has few surface water features. A canal system conveys water to headwaters of Mullock Creek. There are a small number of borrow pits and stormwater ponds that are incorporated into the development as amenities.

Un-weighted Ranks: Total Discharge = 2.0 Nutrient Load = 12.5
TSS Load = 9 Wetland Risk = 50.0

Table 3.4. Land use in the Mullock Creek - 4 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	3,042	84.6
Cropland/Pasture	251	7.0
Citrus	0	0.0
Wetland	55	1.5
Forested Upland	224	6.2
Water	24	0.7

3.5 Hendry Creek - 6 Tertiary Basin

Location: The Hendry Creek - 6 basin is a small watershed-unit that encompasses the East Fork of Hendry Creek. The basin includes both banks of the creek and a heavily developed area on the east side of U.S. 41.

Land Use: The basin's western portion is dominated by moderate density residential subdivisions**.** The basin's eastern half, east of U.S. 41 is dominated by dense residential and commercial development. These areas have a high proportion of impervious surfaces and fairly limited stormwater facilities. The wetlands in this basin are primarily associated with Hendry Creek.

Soils: HSG D soils are most common (439.1 acres).

Hydrologic Features: The East Fork of Hendry Creek is the dominant hydrologic feature. East of U.S. 41, there are also several drainage canals and a small number of borrow pits that serve stormwater functions.

Un-weighted Ranks: Total Discharge = 1.0 Nutrient Load =24.0
TSS Load = 1 Wetland Risk = 41.0

Table 3.5. Land cover in the Hendry Creek - 6 tertiary basin.		
Land Use/Land Cover Type	**Area (acres)**	**Percent Coverage**
Urban	294	65.4
Cropland/Pasture	30	6.7
Citrus	0	0.0
Wetland	83	18.5
Forested Upland	33	7.4
Water	9	2.0

3.6 Hendry Creek - 9 Tertiary Basin

Location: This is a small subbasin located just north of Hendry Creek and east of Lakes Park.

Land Use: This subbasin is predominantly urban, though it contains isolated areas of forested uplands. There is a significant amount of commercial land use within this subbasin.

Soils: HSG D soils are most common (488.6 acres), followed by C (21.6 acres).

Hydrologic Features: A large borrow pit used for stormwater and a small number of isolated wetlands are the only hydrologic features in the subbasin.

Un-weighted Ranks: Total Discharge = 5.0 Nutrient Load = 15.0
TSS Load = 6 Wetland Risk = 61.5

Table 3.6. Land cover in the Hendry Creek - 9 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	346	66.9
Cropland/Pasture	0	0.0
Citrus	0	0.0
Wetland	2	0.5
Forested Upland	153	29.6
Water	15	3.0

3.7 Ten-Mile Canal - 4 Tertiary Basin

Location: The Ten-Mile Canal - 4 tertiary basin is another very small subbasin. It is located near the outfall of the Ten-Mile Canal. The subbasin lies between the canal (to the west) and U.S. 41 to the east.

Land Use: The subbasin is dominated by a dense, mobile home development and commercial land uses along U.S. 41.

Soils: HSG D soils are most common (91.8 acres), followed by C (55.1 acres).

Hydrologic Features: The Ten-Mile Canal forms this subbasin's western border and dominates the subbasin's hydrologic features and hydrology.

Un-weighted Ranks: Total Discharge = 3.0 Nutrient Load = 19.0
TSS Load = 8 Wetland Risk = 61.5

Table 3.7. Land cover in the Ten-Mile Canal - 4 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	106	69.4
Cropland/Pasture	21	13.5
Citrus	0	0.0
Wetland	16	10.5
Forested Upland	2	1.4
Water	8	5.2

3.8 Ten-Mile Canal - 9 Tertiary Basin

Location: This subbasin is located on the south side of Colonial Boulevard, north of the Six-Mile Cypress Slough.

Land Use: The northeastern side of this basin is predominantly pasture and cropland, and the southwest side is predominantly residential and commercial developments or units. This subbasin continues to undergo land conversion for development.

Soils: HSG D soils are most common (1264.2 acres).

Hydrologic Features: Medium-sized borrow pits and the Ten-Mile Canal (along the basin's western border) dominate the hydrologic features in this subbasin.

Un-Weighted Ranks: Total Discharge = 8.0 Nutrient Load = 17.5
TSS Load = 11 Wetland Risk = 17.5

Table 3.8. Land cover in the Ten-Mile Canal - 9 tertiary basin.

Land Use/Land Cover Type	Area (acres)	Percent Coverage
Urban	668	52.8
Cropland/Pasture	327	25.8
Citrus	0	0.0
Wetland	168	13.2
Forested Upland	85	6.7
Water	18	1.4